



## PATENT COOPERATION TREATY

## PCT

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference JSONY-475PCT	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/JP2003/015917	International filing date (day/month/year) 12 December 2003 (12.12.2003)	Priority date (day/month/year) 16 December 2002 (16.12.2002)
International Patent Classification (IPC) or national classification and IPC G02F 1/1334, 1/133, 1/13		
Applicant	SONY CORPORATION	

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

2. This REPORT consists of a total of 5 sheets, including this cover sheet.

This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of \_\_\_\_\_ sheets.

3. This report contains indications relating to the following items:

- I  Basis of the report
- II  Priority
- III  Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV  Lack of unity of invention
- V  Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI  Certain documents cited
- VII  Certain defects in the international application
- VIII  Certain observations on the international application

Date of submission of the demand 27 February 2004 (27.02.2004)	Date of completion of this report 16 June 2004 (16.06.2004)
Name and mailing address of the IPEA/JP	Authorized officer
Facsimile No.	Telephone No.

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/JP2003/015917

## I. Basis of the report

## 1. With regard to the elements of the international application:\*

 the international application as originally filed the description:

pages \_\_\_\_\_, as originally filed

pages \_\_\_\_\_, filed with the demand

pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_

 the claims:

pages \_\_\_\_\_, as originally filed

pages \_\_\_\_\_, as amended (together with any statement under Article 19) \_\_\_\_\_, filed with the demand

pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_

pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_

 the drawings:

pages \_\_\_\_\_, as originally filed

pages \_\_\_\_\_, filed with the demand

pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_

 the sequence listing part of the description:

pages \_\_\_\_\_, as originally filed

pages \_\_\_\_\_, filed with the demand

pages \_\_\_\_\_, filed with the letter of \_\_\_\_\_

## 2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item. These elements were available or furnished to this Authority in the following language \_\_\_\_\_ which is:

 the language of a translation furnished for the purposes of international search (under Rule 23.1(b)). the language of publication of the international application (under Rule 48.3(b)). the language of the translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

## 3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

 contained in the international application in written form. filed together with the international application in computer readable form. furnished subsequently to this Authority in written form. furnished subsequently to this Authority in computer readable form. The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished. The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.4.  The amendments have resulted in the cancellation of: the description, pages \_\_\_\_\_ the claims, Nos. \_\_\_\_\_ the drawings, sheets/fig \_\_\_\_\_5.  This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).\*\*

\* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rule 70.16 and 70.17).

\*\* Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

## IV. Lack of unity of invention

1. In response to the invitation to restrict or pay additional fees the applicant has:

- restricted the claims.
- paid additional fees.
- paid additional fees under protest.
- neither restricted nor paid additional fees.

2.  This Authority found that the requirement of unity of invention is not complied with and chose, according to Rule 68.1, not to invite the applicant to restrict or pay additional fees.

3. This Authority considers that the requirement of unity of invention in accordance with Rules 13.1, 13.2 and 13.3 is:

- complied with.
- not complied with for the following reasons:

For the reasons given below, this international application is found to include three inventions that do not satisfy the requirement of unity of invention.

Main inventions: "Claims 1-3"

Second inventions: "Claims 4-8"

Third invention: "Claim 9"

As a result of performing a search for claims 1-2 as "initially described inventions (main inventions)," it became clear that the features described in claims 1-3 were disclosed in document 1 (JP, 6-3651, A) and document 2 (JP, 9-68701, A); therefore, they do not appear to be novel.

Therefore, the features described in claims 1-3 are not found to be "special technical features" under PCT Rule 13.2, second sentence.

As far as claims 4-8 and the above prior art are compared, the "(present) special technical feature" of the second inventions is a "temperature detecting part."

On the other hand, as far as claim 9 and the above prior art are compared, the "(present) special technical feature" of the third invention is an "imaging device."

There is no technical relationship among the main inventions and the second and third inventions involving one or more of the same or corresponding special technical features.

4. Consequently, the following parts of the international application were the subject of international preliminary examination in establishing this report:

- all parts.
- the parts relating to claims Nos. \_\_\_\_\_

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/JP03/15917

## V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

## 1. Statement

Novelty (N)	Claims	4-9	YES
	Claims	1-3	NO
Inventive step (IS)	Claims		YES
	Claims	1-9	NO
Industrial applicability (IA)	Claims	1-9	YES
	Claims		NO

## 2. Citations and explanations

Document 1: JP, 6-3651, A (Ricoh Company, Ltd.)  
January 14, 1994 (01.14.94), Full text, all drawings

Document 2: JP, 9-68701, A (Dainippon Ink and Chemicals, Inc.)  
March 11, 1997 (03.11.97), Full text, all drawings

Document 3: JP, 9-304753, A (Seiko Instruments Inc.)  
November 28, 1997 (11.28.97), Full text, all drawings

Document 4: WO, 00/07065, A (Matsushita Electric Industrial Co., Ltd.)  
February 10, 2000 (02.10.00), Full text, all drawings  
& JP, 2000-105363, A

Document 5: JP, 11-112849, A (Sumitomo Electric Industries, Ltd.)  
April 23, 1999 (04.23.99), Full text, all drawings

## Supplemental Box

(To be used when the space in any of the preceding boxes is not sufficient)

Continuation of Box V:

## Claims 1-3

The inventions described in claims 1-3 do not appear to be novel based on documents 1-2 cited in the ISR.

Document 1 describes a dimming device, wherein the gap between opposing substrates is 2-10 $\mu$ m (paragraph 0005) [in particular, 6 $\mu$ m in the first embodiment (paragraph 0009)].

Document 2 describes a dimming device, wherein the gap between opposing substrates is 4-13 $\mu$ m (paragraph 0070) [in particular, 6 $\mu$ m in the first embodiment (paragraph 0088) and 9.6 $\mu$ m in the twelfth embodiment (paragraph 0170)].

## Claims 4-8

The inventions described in claims 4-8 do not appear to involve an inventive step based on documents 1-4 cited in the ISR.

Documents 3-4 describe a liquid crystal device comprising a temperature detecting part and pulse controlling part.

The dimming device described in documents 1-2 and the liquid crystal device described in documents 3-4 belong to closely related technical fields; therefore, applying the temperature detecting part and pulse controlling part described in documents 3-4 to the dimming device described in documents 1-2 could be easily conceived of by a party skilled in the art.

## Claim 9

The invention described in claim 9 does not appear to involve an inventive step based on documents 1-5 cited in the ISR.

Document 5 describes an imaging device wherein a dimming device is disposed in an imaging system light path.

The dimming device described in documents 1-2 and the imaging device described in document 5 belong to closely related technical fields; therefore, applying the dimming device described in documents 1-2 to the imaging device described in document 5 could be easily conceived of by a party skilled in the art.